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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,595

12/22/2003

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Kampen 1-13

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EXAMINER

LOO, JUVENA W

ART UNIT

PAPER NUMBER

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DELIVERY MODE

12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,595	Applicant(s) VAN KAMPEN ET AL.	
	Examiner Juvena W. Loo	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The Declaration filed on October 30, 2007 under 37 CFR 1.131 has been considered but is ineffective to overcome the Meiser et al. (US 2005/0018624 A1) reference.

2. The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Meiser et al. (US2005/0018624 A1) reference to either a constructive reduction to practice or an actual reduction to practice. In particular, the evidence submitted shows dates that are later than the filing date of the Meiser et al. reference. In addition, the evidence submitted does not provide the actual dates of acts relied on to establish diligence. See MPEP 715.07 [R-3] II, Establishment of Dates.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-21 are rejected under 35 USC 102(e) as being anticipated by Meier et al. (US 2005/0018624 A1).

Regarding claim 1, Meier discloses a station of a contention-based WLAN system in which the station is adapted to operate in awake and doze states, a method comprising:

(A) the station transitioning from the doze state to the awake state (Page 6, section 0085: the station automatically transitions to awake state); and

(B) the station transmits to an access point (AP) of the system a first frame, wherein a designated bit in the first frame informs the AP that the station will remain in the awake state and be available to receive at least one transmission from the AP (Figures 8 and 10; Page 6, section 0094 and Page 7, section 0099: once the station transitions to the awake state, it either sends a data frame with the More Data bit set to "off" or sends a null frame with the More Data bit set to "off").

Regarding claim 2, Meier discloses all the limitations of claim 1. Additionally, Meier discloses the contention-based WLAN system conforms to an IEEE 802.11 standard (Page 3, section 0041).

Regarding claim 3, Meier discloses all the limitations of claim 1. Additionally, Meier discloses the contention-based WLAN system conforms to an extension of an IEEE 802.11 standard (Page 4, section 0057).

Regarding claim 4, Meier discloses all the limitations of claim 1. Additionally, Meier discloses that steps (A) and (B) are performed independent of any beacon schedule for the system (Page 7, section 0102: the wake-up schedule may be beacon-aligned or unaligned).

Regarding claim 5, Meier discloses all the limitations of claim 1. Additionally, Meier discloses the method further comprising the station receives from the AP an acknowledgement frame corresponding to the first frame (Figures 8 and 10: the AP responds to the first frame from the station with a Acknowledgement frame).

Regarding claim 6, Meier discloses all the limitations of claim 5. Additionally, Meier discloses that a designated bit in the acknowledgement frame informs the station whether the AP has data to transmit to the station (Figures 8 and 10; Page 6, section 0094 and Page 7, section 0099: the AP sends a Acknowledgement frame with the More Data flag set to either "on" to indicate it has data to transmit to the station or "off" to indicate it has no additional data for the station).

Regarding claim 7, Meier discloses all the limitations of claim 1. Additionally, Meier discloses that when data is available for transmission from the station to the AP, the first frame corresponds to the data (Figure 8; Page 6, section 0094: the station sends a data frame during an unscheduled wake-up period); and

when there is no data available for transmission from the station to the AP, the first frame is a null frame. (Figure 10; Page 7, section 0099: once the station is in the awake state, the station sends a null frame to the AP).

Regarding claim 8, Meier discloses all the limitations of claim 1. Additionally, Meier discloses that step (A) comprises starting a timer (Page 5, section 0072: the AP establishes the "start time" of a periodic wakeup time as an integer multiple of a TSF timer ticks); and when there is no data available for transmission from the station to the AP, transitioning the station from the doze state to the awake state after the timer reaches a threshold value (Page 5, section 0072: a station must be awake at each scheduled wakeup time); and that step (B) comprises the first frame is a null frame (Figure 10; Page 7, section 0099: once the station is in a wakeup state, the station sends a null frame to the AP).

Regarding claim 9, Meier discloses all the limitations of claim 8. Additionally, Meier discloses that the threshold value is less than an inter-beacon time interval (Page 5, section 0072: a scheduled wakeup period starts at the scheduled wakeup time and ends when the station receives a downlink frame with the More Data bit set to "off" or it receives a Beacon with the Traffic Indication Message bit set to "off").

Regarding claim 10, Meier discloses all the limitations of claim 1. Additionally, Meier inherently discloses the designated bit is a power management bit of an IEEE

802.11 standard (Figure 4, 402; Page 4, section 60: the station notifies the AP that it is operating in an power-save delivery mode).

Regarding claim 11, Meier discloses all the limitations of claim 1. Additionally, Meier discloses the designated bit is a more data bit of an IEEE 802.11 standard (Page 6, section 0094: the station sends frames to the AP with the More Data bit set to either "off" or "on").

Regarding claim 12, Meier discloses all the limitations of claim 1. Additionally, Meier discloses the method further comprising:

(C) with the station in the awake state and the AP informed that the station is in the awake state, transmitting to the AP a closing frame, wherein a designated bit in the closing frame informs the AP that the station will transition to the doze state (Figures 8, 9, and 10; Page 6, section 0096 and Page 7, section 0099: the station sends an Acknowledgement frame with More Data bit set to "off" indicating that there is no more data to be transmitted to the AP); and

(D) transitioning the station from the awake state to the doze state (Figures 8, 9, 10; Page 6, section 0096 and Page 7, section 0099: the station returns to a doze state after the Acknowledgement frame when there is no more data to send to the AP).

Regarding claim 13, Meier discloses an access point (AP) of a contention-based WLAN system in which a station is adapted to operate in awake and doze states, a method comprising:

(A) receiving from the station a first frame, wherein a designated bit in the first frame informs the AP that the station will remain in the awake state and be available to receive at least one transmission from the AP (Figures 8 and 10; Page 6, section 0094 and Page 7, section 0099: once the station transitions to the awake state, it either sends a data frame with the More Data bit set to "off" or sends a null frame with the More Data bit set to "off"); and

(B) transmitting to the station an acknowledgement frame corresponding to the first frame, wherein a designated bit in the acknowledgement frame informs the station whether the AP has data to transmit to the station (Figures 8 and 10; Page 6, section 0094 and Page 7, section 0099: the AP responds to the first frame from the station with a Acknowledgement frame with the More Data bit set either to "on" or "off" to indicate whether the AP has data to send to the station).

Regarding claim 14, Meier discloses all the limitations of claim 13. Additionally, Meier discloses the contention-based WLAN system conforms to an extension of an IEEE 802.11 standard (Page 4, section 0057).

Regarding claim 15, Meier discloses all the limitations of claim 14. Additionally, Meier discloses the designated bit is a more data bit of the IEEE 802.11 standard

(Figures 8 and 10: the AP responds to the first frame from the station with a Acknowledgement frame with the More Data bit set to either "on" or "off").

Regarding claim 16, Meier discloses all the limitations of claim 13. Additionally, Meier discloses that steps (A) and (B) are performed independent of any beacon schedule for the system (Page 7, section 0102: the wake-up schedule may be beacon-aligned or unaligned).

Regarding claim 17, Meier discloses all the limitations of claim 13. Additionally, Meier discloses when data is available for transmission from the station to the AP, the first frame corresponds to the data (Figure 8; Page 6, section 0094: the station sends a data frame to the AP during an unscheduled wake-up period); and when there is no data available for transmission from the station to the AP, the first frame is a null frame. (Figure 10; Page 7, section 0099: once the station is in awake state, the station sends a null frame to the AP).

Regarding claim 18, Meier inherently discloses a station, in a contention-based WLAN system, adapted to operate in awake and doze states (Meier: Figure 3, 304 and 312) comprising:

(A) a processor, wherein, with the station in the doze state, the processor configures the station to transition from the doze state to the awake state (Figure 3, 304 and Page 4, section 0059: the station switches to the awake mode); and

(B) a transceiver, wherein the processor configures the transceiver to transmit to an access point (AP) of the system a first frame (Page 4, section 0059: the station switches to the awake mode and sends a frame to the AP), wherein a designated bit in the first frame informs the AP that the station will remain in the awake state and be available to receive at least one transmission from the AP (Page 6, section 0094: the station switches to the awake mode and sends a frame with the More Data bit set to either "on" or "off" to the AP).

Regarding claim 19, Meier discloses a contention-based WLAN system, comprising an access point (AP) and a station (Figure 1), wherein the station is adapted to operate in awake and doze states (Figure 3, 304 and 312); and the station (Figure 3, 304 and 312) comprises:

(A) a processor, wherein, with the station in the doze state, the processor configures the station to transition from the doze state to the awake state (Figure 3, 304 and Page 4, section 0059: the station switches to the awake mode); and

(B) a transceiver, wherein the processor configures the transceiver to transmit to the AP a first frame (Page 4, section 0059: the station switches to the awake mode and sends a frame to the AP), wherein a designated bit in the first frame informs the AP that the station will remain in the awake state and be available to receive at least one transmission from the AP (Page 6, section 0094: the station switches to the awake mode and sends a frame with the More Data bit set to either "on" or "off" to the AP).

Regarding claim 20, Meier discloses an access point (AP) of a contention-based WLAN system (Figure 2) in which a station is adapted to operate in awake and doze states (Figure 3, 304 and 312), the AP comprising a processor (Figure 2, 208) and a transceiver (Figure 2, 210), wherein the processor configures the transceiver:

(A) to receive from the station a first frame, wherein a designated bit in the first frame informs the AP that the station will remain in the awake state and be available to receive at least one transmission from the AP (Figure 8, 802 and Figure 10, 910; Page 6, section 0094 and Page 7, section 0099: once the station is in awake state, the station either sends a data or a null frame, with the More Data bit set to "off", to the AP); and

(B) to transmit to the station an acknowledgement frame corresponding to the first frame, wherein a designated bit in the acknowledgement frame informs the station whether the AP has data to transmit to the station (Figure 8, 804 and Figure 10, 912; Page 6, section 0094 and Page 7, section 0099: the AP sends an acknowledgement frame with the More Data bit to indicate whether it has data to transmit to the station).

Regarding claim 21, Meier discloses a contention-based WLAN system, comprising an access point (AP) and a station (Figure 1), wherein:

the station is adapted to operate in awake and doze states (Figure 3, 304 and 312); and

the AP comprises a processor and a transceiver (Figure 2), wherein the processor configures the transceiver:

(A) to receive from the station a first frame, wherein a designated bit in the first frame informs the AP that the station will remain in the awake state and be available to receive at least one transmission from the AP (Figure 8, 802 and Figure 10, 910; Page 6, section 0094 and Page 7, section 0099: once the station is in awake state, the station either sends a data or a null frame, with the More Data bit set to "off", to the AP); and

(B) to transmit to the station an acknowledgement frame corresponding to the first frame, wherein a designated bit in the acknowledgement frame informs the station whether the AP has data to transmit to the station (Figure 8, 804 and Figure 10, 912; Page 6, section 0094 and Page 7, section 0099: the AP sends an acknowledgement frame with the More Data bit to indicate whether it has data to transmit to the station).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

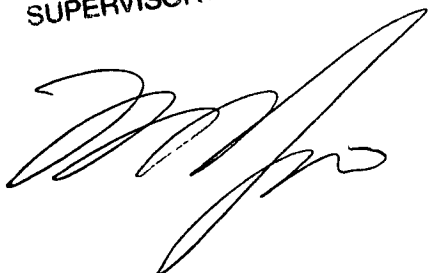
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juvena W. Loo whose telephone number is (571) 270-1974. The examiner can normally be reached on Monday - Friday: 7:30am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KWANG BIN YAO
SUPERVISORY PATENT EXAMINER



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